

Abstract

A motor controller comprising a machine system (12) having a load machine (1), a transmission mechanism (2) for transmitting power, and a motor for driving the load machine through the transmission mechanism; a simulator unit (11) having a numeric model (9) including the machine system, a simulation control section (19) for giving a torque command to the numeric model by using an observable quantity of state of the numeric model, and an evaluating section (10) for sending a control parameter to the simulation control section and an actual control unit; and the actual control unit (18) having an actual control section which receives an observable quantity of state of an actual system and has the same structure as that of the simulator unit and adapted to supply a torque signal to the motor serving as a drive source. Therefore the control gain of a motor controller can be automatically adjusted quickly and optimally.